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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,650	07/03/2001	John G. Apostolopoulos	10012168	9591

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EXAMINER

KOENIG, ANDREW Y

ART UNIT PAPER NUMBER

2623

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/898,650

Applicant(s)

APOSTOLOPOULOS ET AL.

Examiner

Andrew Y. Koenig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/19/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5-8, 10, 14-18, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita).

Regarding claim 1, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21). Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client.

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Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll.10-12).

Regarding claim 5, Matsushita teaches a display device on a computer (label 16).

Regarding claim 6, Matsushita teaches presenting the stream (col. 10, ll. 20-22, col. 11, ll. 13-18), wherein the stream can be audio and/or video (col. 11, ll. 13-18), and must inherently have an audio output in order to present the stream to the user.

Regarding claim 7, Matsushita teaches transmitting information, related to the operation characteristics of the client to the push engines (col. 9, ll. 37-41).

Regarding claims 8, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 47-4), which reads on receiving a first and second multiple description bitstreams at the client. Matsushita teaches the format of the data as using video, such as MPEG (col. 7, ll. 12-14), which inherently stores and decodes the bitstreams for presentation (col. 11, ll. 13-17). Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads

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on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), for presenting the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll.10-12).

Regarding claim 10, Matsushita inherently stores the first and second bitstreams in respective memory portions in order to prevent data from being overwritten by another packet before being used.

Regarding claim 14, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54).

Regarding claim 15, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 16, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 17, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmitting information related to appropriate operation

characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

Regarding claim 18, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21). Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll. 10-12, col. 11, ll. 13-18).

Regarding claim 22, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 23, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 24, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmission means coupled to said synchronization module, wherein the transmission means transmits information related to operation characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 9, 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) in view of U.S. Patent 6,754,277 to Heinzelman et al. (Heinzelman).

Regarding claim 2, Matsushita is silent on a mobile client. In analogous art, Heinzelman teaches receiving video data over a channel of a wireless network, wherein

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the devices can be cellular phones (col. 1, ll. 28-30, which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Heinzelman in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 9, Matsushita is silent on a mobile client. In analogous art, Heinzelman teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 1, ll. 28-30, which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Heinzelman in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 12, Matsushita teaches determining operation characteristics by monitoring the characteristics of channels on which said first and second streams are received (col. 9, ll. 37-41).

Regarding claim 19, Matsushita is silent on a mobile client. In analogous art, Heinzelman teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 1, ll. 28-30, which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by

Heinzelman in order to provide video in different locations and thereby increasing desirable functionality to the user.

5. Claims 3, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) and U.S. Patent 6,754,277 to Heinzelman et al. (Heinzelman) in view of U.S. Patent 5,574,972 to Hulbert.

Regarding claim 3, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41), but is silent on a power strength monitor for monitoring power characteristics of a mobile client. Hulbert teaches a mobile unit (300) in communication with the base stations 100 and 200, and monitoring power characteristics of a mobile client (col. 2, ll. 7-32, col. 3-4, ll. 59-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by power characteristics of a mobile client as taught by Hulbert in order to efficiently switch base stations and reduce the power consumption of the mobile device.

Regarding claim 13, Matsushita is silent on a power strength monitor for monitoring power characteristics of a mobile client. Hulbert teaches a mobile unit (300) in communication with the base stations 100 and 200, and monitoring power characteristics of a mobile client (col. 2, ll. 7-32, col. 3-4, ll. 59-35). Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by power characteristics of a mobile client as taught by Hulbert in order to efficiently switch base stations and reduce the power consumption of the mobile device.

Regarding claim 20, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41), but is silent on a power strength monitor for monitoring power characteristics of a mobile client. Hulbert teaches a mobile unit (300) in communication with the base stations 100 and 200, and monitoring power characteristics of a mobile client (col. 2, ll. 7-32, col. 3-4, ll. 59-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by power characteristics of a mobile client as taught by Hulbert in order to efficiently switch base stations and reduce the power consumption of the mobile device.

6. Claims 4, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) in view of "Error-Resilient Video Compression" (Apostolopoulos).

Regarding claim 4, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using

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MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 11, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 21, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at

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the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

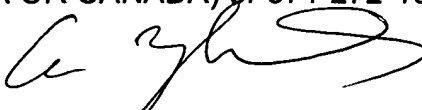
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Koenig whose telephone number is (571) 272-7296. The examiner can normally be reached on M-Fr (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ayk

  
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